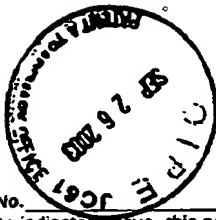


EXPRESS MAIL CERTIFICATE



Date _____ Label No. _____
I hereby certify that, on the date indicated above, this paper or
fee was deposited with the U.S. Postal Service & that it was
addressed for delivery to the Commissioner for Patents, P.O.
Box 1450, Alexandria, VA 22313-1450 by "Express Mail Post
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PLEASE CHARGE ANY DEFICIENCY UP TO \$300.00 OR
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Signature

Customer No.: 07278

Docket No.: 05986/1007686-US5

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

John W. Barnwell

Serial No.: 09/667,130

Art Unit: 1645

Confirmation No.: 8596

Filed: September 21, 2000

For: POLYNUCLEOTIDES ENCODING PLASMODIUM VIVAX BLOOD
STAGE ANTIGENS, ANTIBODIES AND DIAGNOSTIC ASSAYS

September 25, 2003

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted in accordance
with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this
statement and in the listed documents be considered during the pendency of the

above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed: (Check one of the boxes A-D)

- ☐ A. Within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application.
- ☐ B. before the mailing date of a first office action on the merits, or a first office action after filing a request for continued examination.
- ☒ C. after (A) and (B) above, but before the mailing date of a final rejection, a notice of allowance, or any other action that closes prosecution, and Applicants have made the necessary statement in box "i" below or paid the necessary fee in box "ii" below.

(check one of the boxes "i" and "ii" below:)

- ☐ i. Counsel states that, upon information and belief, each item of information listed herein was either (a) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ☒ ii. A check for the fee set forth in 1.17(p), presently believed to be \$180, is enclosed.
- ☐ D. after (A), (B) and (C) above, but before payment of the issue fee: Counsel states that, upon information and belief, each item of information listed herein was either (i) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the IDS; or (ii) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ☐ i. A check for the fee set forth in 1.17 (p), presently believed to be \$180, is enclosed.

2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form

Docket No. 05986/1007686-US5

PTO/SB/08) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A and/or B and fill in blanks, if appropriate.)

- ☐ A. Document(s) _____ is (are) deemed substantially cumulative to document(s) _____, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.
- ☒ B. Certain documents were previously cited by or submitted to the Office in the following prior applications, which are relied upon under 35 U.S.C. 120:

U.S. Patent No. 5,532,133, issued July 2, 1996;
U.S. Patent Application Serial No. 08/478,417, filed June 7, 1995, now abandoned;
U.S. Patent No. 5,874,527, issued February 23, 1999.
U.S. Patent Application Serial No. 08/719,821, filed September 30, 1996; and
U.S. Patent No. 6,231,861, issued May 15, 2001.

Applicant identifies these documents by attaching hereto copies of the forms PTO-892 and PTO/SB/08 from the files of the prior application(s) or a fresh PTO/SB/08 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application.

☐ 3. Document Nos. _____ are not in the English language. In accordance with 1.98(c), Applicant states:

- ☐ An English translation of each document (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application is enclosed.
- ☐ A concise explanation of the relevance of document(s) _____ is found in the attached search report (see MPEP § 609 A(3)x).
- ☐ A concise explanation of the relevance of document(s) _____ is set forth as follows: [Insert concise explanation of relevance]

Docket No. 05986/1007686-US5

- ☐ A concise explanation of the relevance of document(s) _____ can be found on pages _____ of the specification.
- ☐ A concise explanation of document(s) _____ can be found on the attached sheet.

☐ 4. No explanation of relevance is necessary for documents in the English language (see MPEP § 609 A(3)).

☐ 5. Other information being provided for the examiner's consideration follows:

6. In accordance with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

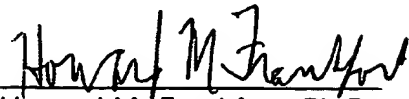
CROSS REFERENCE UNDER 37 C.F.R. §1.78 TO RELATED APPLICATIONS

Pursuant to 37 C.F.R. § 1.78, Applicant notes that the above-identified patent application may be related to the following U.S. Patent Applications:

- (1) U.S. Patent No. 5,532,133, issued July 2, 1996;
- (2) U.S. Patent Application Serial No. 08/478,417, filed June 7, 1995, now abandoned;
- (3) U.S. Patent No. 5,874,527, issued February 23, 1999.
- (4) U.S. Patent Application Serial No. 08/719,821, filed September 30, 1996; and
- (5) U.S. Patent No. 6,231,861, issued May 15, 2001.

Early and favorable consideration is earnestly solicited.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Howard M. Frankfort", written over a horizontal line.

Howard M. Frankfort, Ph.D.

Registration No. 32,613

Agent for Applicant(s)

DARBY & DARBY P.C.
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New York, N.Y. 10022
(212) 527-7700

Docket No. 05986/1007686-US5



PTO/SB/08a/b (08-03)
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Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known			
		Application Number	09/667,130-Conf. #8596		
		Filing Date	September 21, 2000		
		First Named Inventor	John W. Barnwell		
		Art Unit	1645		
		Examiner Name	P. Duffy		
Sheet	1	of	2	Attorney Docket Number	05986/1007686-US5

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA**	US-5,001,225-B1	03-19-1991	Taylor	
	AB**	US-5,130,416-B1	07-14-1992	Willems et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. **CITE NO.: Those patent(s) or publication(s) which are marked with an double asterisk (**) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ²
	CA**	Aikawa, M. et al., Am.J. Pathol. 79:285, 1975.				
	CB**	Anderson, R.G.W., PNAS (USA) 90:10909, 1993.				
	CC**	Anderson, R.G.W., et al., Science 255:410, 1992.				
	CD**	Atkinson, C.T. et al., Blood Cells 16:351, 1990.				
	CE**	Barnwell, J.W. et al., Experimental Parasitology 70:85, 1990.				
	CF**	Bianco, A.E. et al., PNAS (USA) 83:8713, 1986.				
	CG**	Campbell, A.M., in "Laboratory Techniques in Biochemistry and Molecular Biology", Elsevier, 1991, pp. 20-27.				
	CH**	Chappell, T.G. et al., Cell 45:3, 1986.				
	CI**	Eckert et al., Exp. Parasitol. 75:323, 1992.				
	CJ**	Galinski et al., Cell 69:1213, 1992.				
	CK**	Harlow, E. et al., "Antibodies - A Laboratory Manual", Cold Spring Harbor Laboratory, 1988.				
	CL**	Hellstrom, K.E. et al., in "Monoclonal Antibodies for Cancer Detection and Therapy", edited by R.W. Baldwin, Academic Press, 1975, p. 20.				
	CM**	Howard et al., J. of Cell Biol. 103:1269, 1986.				
	CN**	James, M.A. et al., Abstracts of the 41st Annual Meeting of the American Society of Tropical Medicine and Hygiene, Seattle, Wash. Nov. 16-19, 1992, Abstract No. 135, p. 145.				
	CO**	Kumar, N. et al., PNAS (USA) 85:6277, 1988.				
	CP**	Lathé, R., J. Mol. Biol. 183:1, 1985.				
	CQ**	Matsumoto, Y. et al., Am. J. Trop. Med. Hyg. 39(4):317, 1988.				
	CR**	Maurer, P.H. et al., Methods in Enzymology, 70:49, 1980.				
	CS**	Minchiotti, L. et al., Abstract Biochim. Biophys. Acta, 1119:232, 1992.				
	CT**	Nolte, D., et al., Mol and Biochem. Parasitol. 49:253, 1991.				
	CU**	O'Connell et al., MD & DI pp. 31-36, December 1985.				
	CV**	O'Connell et al., Clin. Chem 31(9):1424, 1985.				
Examiner Signature		Date Considered				

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Substitute for form 1449A/B/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Application Number	09/667,130-Conf. #8596	
			Filing Date	September 21, 2000	
			First Named Inventor	John W. Barnwell	
			Art Unit	1645	
			Examiner Name	P. Duffy	
Sheet	2	of	2	Attorney Docket Number	05986/1007686-US5

	CW**	Panton et al., Mol. and Biochem. Parasitol. 35:149, 1989.	
	CX**	Rock et al., Parasitol. 95L209, 1987.	
	CY**	Thomas, A.W. et al. Parasite Immunol. 12:105, 1990.	
	CZ**	Vernick et al., Nucleic Acids Res. 16(14):6883, 1988.	
	CA1**	Wellems et al., Proc. Natl. Acad. Sci. USA 83:6065-6069, 1986.	
	CB1**	Wilson et al., Parasitol. 71:183, 1975.	
	CC1**	Wilson et al., The Lancet, July 26, 1969, pp. 201-204.	
	CD1**	Wilson et al., Nature 284:451, 1980.	
	CE1**	Wilson et al., Int. J. Parasitol. 3:511, 1973.	
	CF1**	Yang Y-F et al., Mol. and Biochem. Parasitol. 26:61, 1987.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. **CITE NO.: Those patent(s) or publication(s) which are marked with an double asterisk (**) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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